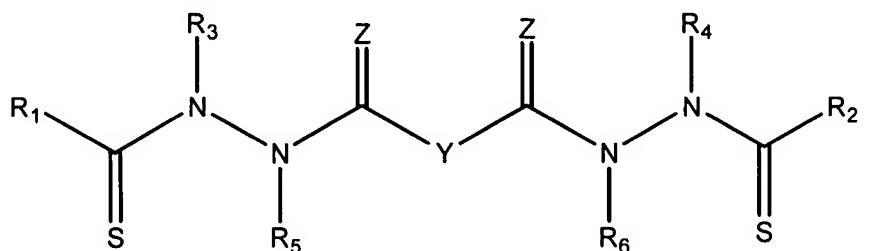


Amendments to the Claims

Please amend Claims 1, 8 and 17. Please cancel Claim 36. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A method of treating a subject with a multi-drug resistant cancer selected from the group consisting of leukemia, uterine sarcoma and melanoma, said method comprising administering to the subject an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

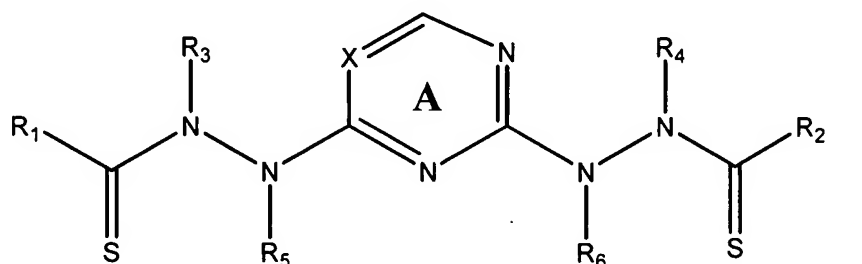
Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is a substituted or unsubstituted aromatic group;

$\text{R}_1\text{-R}_4$ are independently -H, an unsubstituted aliphatic group, a substituted aliphatic group, an unsubstituted aryl group or a substituted aryl group, or R_1 and R_3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R_2 and R_4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring;

$\text{R}_5\text{-R}_6$ are independently -H, an unsubstituted aliphatic group, a substituted aliphatic group, an unsubstituted aryl group or a substituted aryl group; and

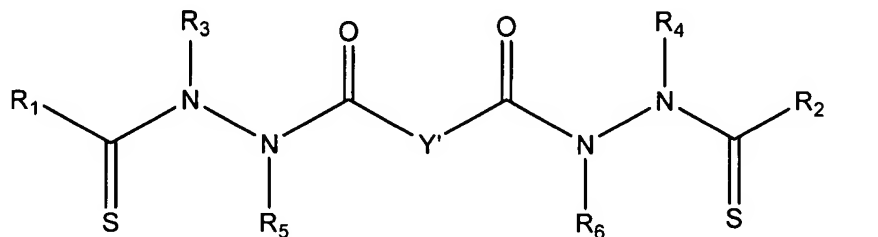
Z is =O or =S.

2. (Original) The method of Claim 1 wherein R_1 and R_2 are the same and R_3 and R_4 are the same.
3. (Original) The method of Claim 2 wherein Y, taken together with both $>C=Z$ groups to which it is bonded, is a substituted or unsubstituted arylene group.
4. (Original) The method of Claim 3 wherein the compound is represented by the following structural formula:



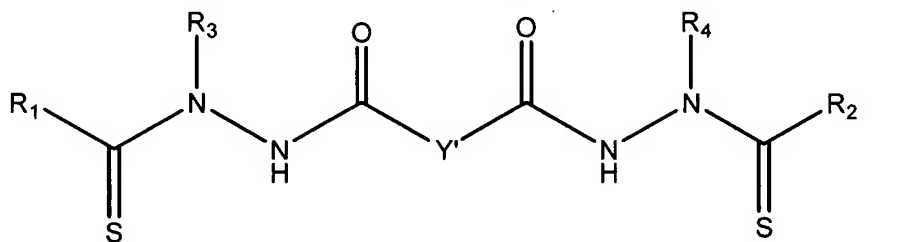
wherein Ring A is substituted or unsubstituted and X is -CH- or -N-.

5. (Previously presented) The method of Claim 2 wherein Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group.
6. (Original) The method of Claim 5 wherein Y is a covalent bond, $-C(R_7R_8)-$, $-(CH_2CH_2)-$, *trans*-(CH=CH)-, *cis*-(CH=CH)-, $-(CC)-$ or a 1,4-phenylene group.
7. (Original) The method of Claim 2 wherein the compound is represented by the following structural formula:



wherein Y' is a covalent bond or -C(R₇R₈)- and R₇ and R₈ are each independently -H, an aliphatic or substituted aliphatic group, or R₇ is -H and R₈ is a substituted or unsubstituted aliphatic group or substituted or unsubstituted aryl group, or, R₇ and R₈, taken together, are a C2-C6 substituted or unsubstituted alkylene group.

8. (Currently Amended) A method of treating a subject with a multi-drug resistant cancer selected from the group consisting of leukemia, uterine sarcoma and melanoma, said method comprising administering to the subject an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

Y' is a covalent bond or -C(R₇R₈)-;

R₁ and R₂ are each a substituted or unsubstituted aryl group;

R₃ and R₄ are each a substituted or unsubstituted aliphatic group;

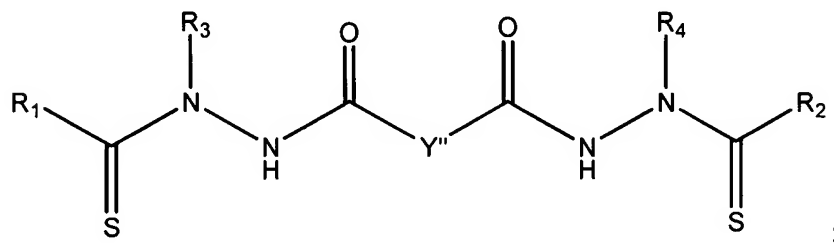
R₇ is -H; and

R₈ is -H, an aliphatic or substituted aliphatic group.

9. (Original) The method of Claim 8 wherein R₁ and R₂ are the same and R₃ and R₄ are the same.
10. (Original) The method of Claim 9 wherein R₃ and R₄ are each an alkyl group and R₈ is -H or methyl.
11. (Original) The method of Claim 10 wherein R₁ and R₂ are each a substituted or unsubstituted phenyl group and R₃ and R₄ are each methyl or ethyl.

12. (Previously presented) The method of Claim 11 wherein the phenyl group represented by R_1 and the phenyl group represented by R_2 are optionally substituted with one or more groups selected from OH, -Br, -Cl, -I, -F, -OR^a, -O-COR^a, -COR^a, -CN, -NO₂, -COOH, -SO₃H, -NH₂, -NHR^a, -N(R^aR^b), -COOR^a, -CHO, -CONH₂, -CONHR^a, -CON(R^aR^b), -NHCOR^a, -NRCOR^a, -NHCONH₂, -NHCONR^aH, -NHCON(R^aR^b), -NR^cCONH₂, -NR^cCONR^aH, -NR^cCON(R^aR^b), -C(=NH)-NH₂, -C(=NH)-NHR^a, -C(=NH)-N(R^aR^b), -C(=NR^c)-NH₂, -C(=NR^c)-NHR^a, -C(=NR^c)-N(R^aR^b), -NH-C(=NH)-NH₂, -NH-C(=NH)-NHR^a, -NH-C(=NH)-N(R^aR^b), -NH-C(=NR^c)-NH₂, -NH-C(=NR^c)-NHR^a, -NH-C(=NR^c)-N(R^aR^b), -NR^d-C(=NH)-NH₂, -NR^d-C(=NH)-NHR^a, -NR^d-C(=NH)-N(R^aR^b), -NR^d-C(=NR^c)-NH₂, -NR^d-C(=NR^c)-NHR^a, -NR^d-C(=NR^c)-N(R^aR^b), -NHNH₂, -NHNHR^a, -NHNR^aR^b, -SO₂NH₂, -SO₂NHR^a, -SO₂NR^aR^b, -CH=CHR^a, -CH=CR^aR^b, -CR^c=CR^aR^b, -CR^c=CHR^a, -CR^c=CR^aR^b, -CCR^a, -SH, -SR^a, -S(O)R^a, -S(O)₂R^a, a non-aromatic heterocyclic group, a substituted non-aromatic heterocyclic group, a benzyl group, a substituted benzyl group, an aryl group or substituted aryl group, wherein R^a-R^d are each independently an alkyl group, substituted alkyl group, benzyl, substituted benzyl, aromatic or substituted aromatic group, or, -N(R^aR^b), taken together, form a substituted or unsubstituted non-aromatic heterocyclic group.

13. (Original) The method of Claim 1 wherein the compound is represented by the following structural formula:

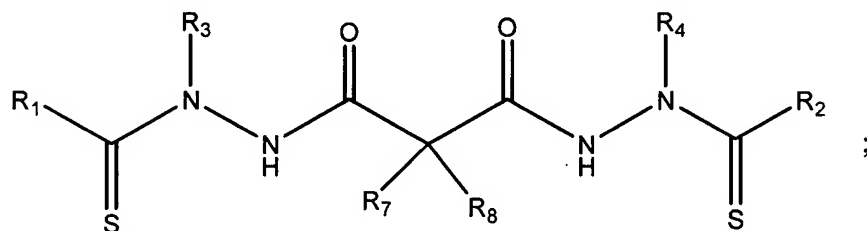


wherein

Y'' is a covalent bond or -CH₂-; and

R₁ and R₂ are both a substituted or unsubstituted aliphatic group.

14. (Original) The method of Claim 13 wherein R_1 and R_2 are both C3-C8 cycloalkyl group optionally substituted with at least one alkyl group.
15. (Original) The method of Claim 14 wherein R_3 and R_4 are both a substituted or unsubstituted alkyl group.
16. (Original) The method of Claim 15 wherein R_1 and R_2 are both cyclopropyl or 1-methylcyclopropyl.
17. (Currently Amended) A method of treating a subject with a multi-drug resistant cancer selected from the group consisting of leukemia, uterine sarcoma and melanoma, said method comprising administering to the subject an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

- R_1 and R_2 are both phenyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;
- R_1 and R_2 are both phenyl; R_3 and R_4 are both ethyl; R_7 and R_8 are both -H;
- R_1 and R_2 are both 4-cyanophenyl; R_3 and R_4 are both methyl; R_7 is methyl; R_8 is -H;
- R_1 and R_2 are both 4-methoxyphenyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;
- R_1 and R_2 are both phenyl; R_3 and R_4 are both methyl; R_7 is methyl; R_8 is -H;
- R_1 and R_2 are both phenyl; R_3 and R_4 are both ethyl; R_7 is methyl; R_8 is -H;
- R_1 and R_2 are both 4-cyanophenyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;

R₁ and R₂ are both 2,5-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,5-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both 3-cyanophenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 3-fluorophenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 4-chlorophenyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both 2-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 3-methoxyphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,3-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,3-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both 2,5-difluorophenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,5-difluorophenyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both 2,5-dichlorophenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,5-dimethylphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,5-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both phenyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2,5-dimethoxyphenyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both cyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both cyclopropyl; R₃ and R₄ are both ethyl; R₇ and R₈ are both -H;

R₁ and R₂ are both cyclopropyl; R₃ and R₄ are both methyl; R₇ is methyl; R₈ is -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ is methyl and R₈ is -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ is ethyl and R₈ is -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ is *n*-propyl and R₈ is -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both methyl;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ and R₄ are both ethyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 1-methylcyclopropyl; R₃ is methyl, and R₄ is ethyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2-methylcyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both 2-phenylcyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

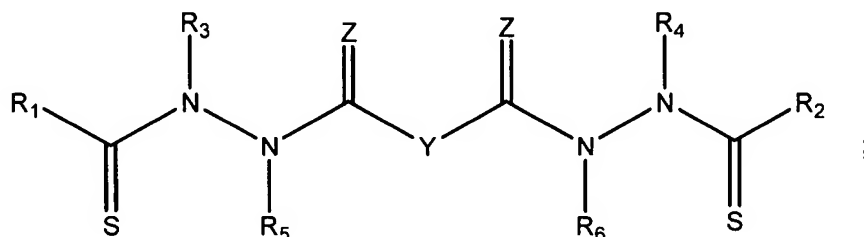
R₁ and R₂ are both 1-phenylcyclopropyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both cyclobutyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R₁ and R₂ are both cyclopentyl; R₃ and R₄ are both methyl; R₇ and R₈ are both -H;

R_1 and R_2 are both cyclohexyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;
 R_1 and R_2 are both cyclohexyl; R_3 and R_4 are both phenyl; R_7 and R_8 are both -H;
 R_1 and R_2 are both methyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;
 R_1 and R_2 are both methyl; R_3 and R_4 are both *t*-butyl; R_7 and R_8 are both -H;
 R_1 and R_2 are both methyl; R_3 and R_4 are both phenyl; R_7 and R_8 are both -H;
 R_1 and R_2 are both *t*-butyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H;
 R_1 and R_2 are ethyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H; or
 R_1 and R_2 are both *n*-propyl; R_3 and R_4 are both methyl; R_7 and R_8 are both -H.

18. (Previously Presented) A method of treating a subject other than a mouse with cancer, said method comprising administering to the subject an effective amount of a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group, or, Y, taken together with both $>C=Z$ groups to which it is bonded, is a substituted or unsubstituted aromatic group;

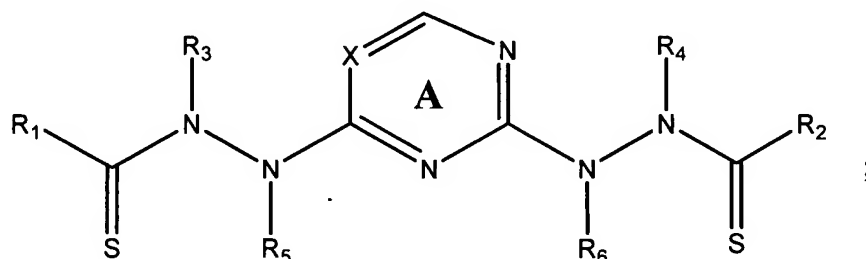
R_1 - R_4 are independently -H, an unsubstituted aliphatic group, a substituted aliphatic group, an unsubstituted aryl group or a substituted aryl group, or R_1 and R_3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R_2 and R_4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring;

R_5 - R_6 are independently -H, an unsubstituted aliphatic group, a substituted aliphatic group, an unsubstituted aryl group or a substituted aryl group; and

Z is =O or =S;

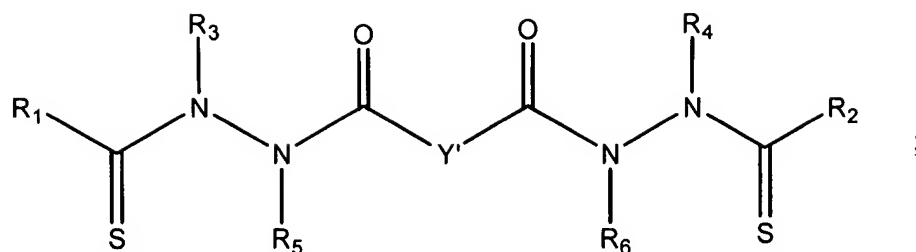
wherein the subject is optionally co-administered a second anti-cancer agent other than taxol or a taxol analog.

19. (Original) The method of Claim 18 wherein R_1 and R_2 are the same and R_3 and R_4 are the same.
20. (Original) The method of Claim 19 wherein Y, taken together with both $>C=Z$ groups to which it is bonded, is a substituted or unsubstituted arylene group.
21. (Original) The method of Claim 20 wherein the compound is represented by the following structural formula:



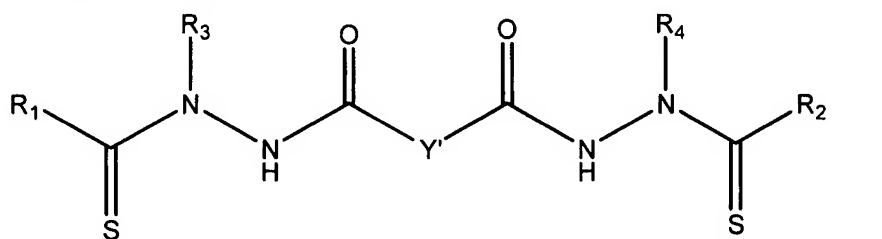
wherein Ring A is substituted or unsubstituted and X is -CH- or -N-.

22. (Previously presented) The method of Claim 19 wherein Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group.
23. (Original) The method of Claim 22 wherein Y is a covalent bond, $-(CH_2CH_2)-$, *trans*-(CH=CH)-, *cis*-(CH=CH)-, $-(CC)-$ or a 1,4-phenylene group.
24. (Previously presented) The method of Claim 19 wherein the compound is represented by the following structural formula:



wherein Y' is a covalent bond or -C(R₇R₈)- and R₇ and R₈ are each independently -H, an unsubstituted aliphatic or substituted aliphatic group, or R₇ is -H and R₈ is a substituted or unsubstituted aryl group, or, R₇ and R₈, taken together, are a C₂-C₆ substituted or unsubstituted alkylene group.

25. (Previously presented) The method of Claim 24 wherein the compound is represented by the following structural formula:



Y' is a covalent bond or -C(R₇R₈)-;

R₁ and R₂ are each a substituted or unsubstituted aryl group;

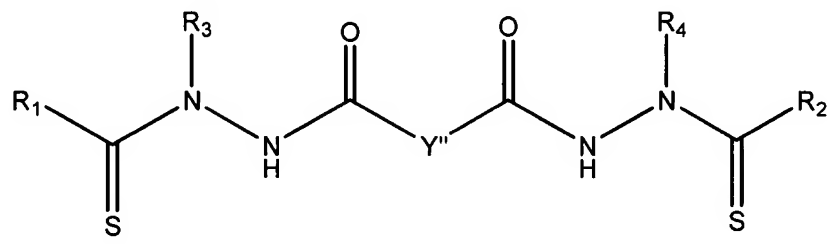
R₃ and R₄ are each a substituted or unsubstituted aliphatic group;

R₇ is -H; and

R₈ is -H, an unsubstituted aliphatic or substituted aliphatic group.

26. (Original) The method of Claim 25 wherein R₁ and R₂ are the same and R₃ and R₄ are the same.
27. (Original) The method of Claim 26 wherein R₃ and R₄ are each an alkyl group and R₈ is -H or methyl.
28. (Original) The method of Claim 27 wherein R₁ and R₂ are each a substituted or unsubstituted phenyl group and R₃ and R₄ are each methyl or ethyl.

29. (Previously presented) The method of Claim 28 wherein the phenyl group represented by R_1 and the phenyl group represented by R_2 are optionally substituted with one or more groups selected from -OH, -Br, -Cl, -I, -F, -OR^a, -O-COR^a, -COR^a, -CN, -NO₂, -COOH, -SO₃H, -NH₂, -NHR^a, -N(R^aR^b), -COOR^a, -CHO, -CONH₂, -CONHR^a, -CON(R^aR^b), -NHCOR^a, -NRCOR^a, -NHCONH₂, -NHCONR^aH, -NHCON(R^aR^b), -NR^cCONH₂, -NR^cCONR^aH, -NR^cCON(R^aR^b), -C(=NH)-NH₂, -C(=NH)-NHR^a, -C(=NH)-N(R^aR^b), -C(=NR^c)-NH₂, -C(=NR^c)-NHR^a, -C(=NR^c)-N(R^aR^b), -NH-C(=NH)-NH₂, -NH-C(=NH)-NHR^a, -NH-C(=NH)-N(R^aR^b), -NH-C(=NR^c)-NH₂, -NH-C(=NR^c)-NHR^a, -NH-C(=NR^c)-N(R^aR^b), -NR^d-C(=NH)-NH₂, -NR^d-C(=NH)-NHR^a, -NR^d-C(=NH)-N(R^aR^b), -NR^d-C(=NR^c)-NH₂, -NR^d-C(=NR^c)-NHR^a, -NR^d-C(=NR^c)-N(R^aR^b), -NHNH₂, -NHNHR^a, -NHN(R^aR^b)-SO₂NH₂, -SO₂NHR^a, -SO₂N(R^aR^b), -CH=CHR^a, -CH=CR^aR^b, -CR^c=CR^aR^b, -CR^c=CHR^a, -CR^c=CR^aR^b, -CCR^a, -SH, -SR^a, -S(O)R^a, -S(O)₂R^a, a non-aromatic heterocyclic group, a substituted non-aromatic heterocyclic group, a benzyl group, a substituted benzyl group, an aryl group or substituted aryl group, wherein R^a-R^d are each independently an alkyl group, substituted alkyl group, benzyl, substituted benzyl, aromatic or substituted aromatic group, or, -N(R^aR^b), taken together, form a substituted or unsubstituted non-aromatic heterocyclic group.
30. (Original) The method of Claim 14 wherein the compound is represented by the following structural formula:

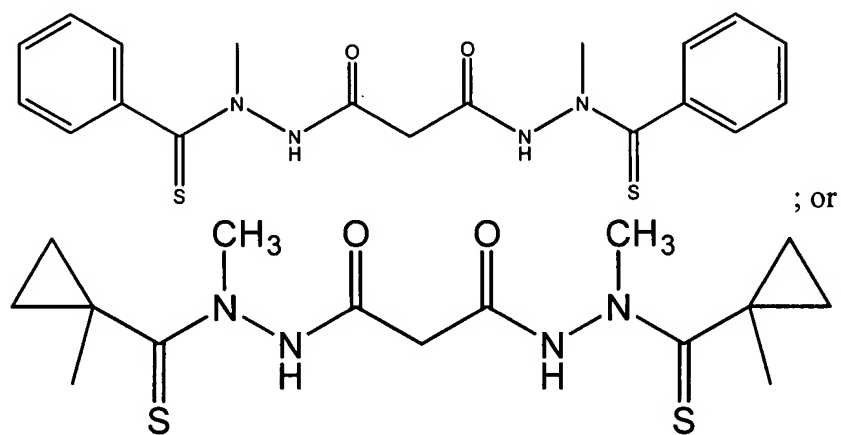


wherein

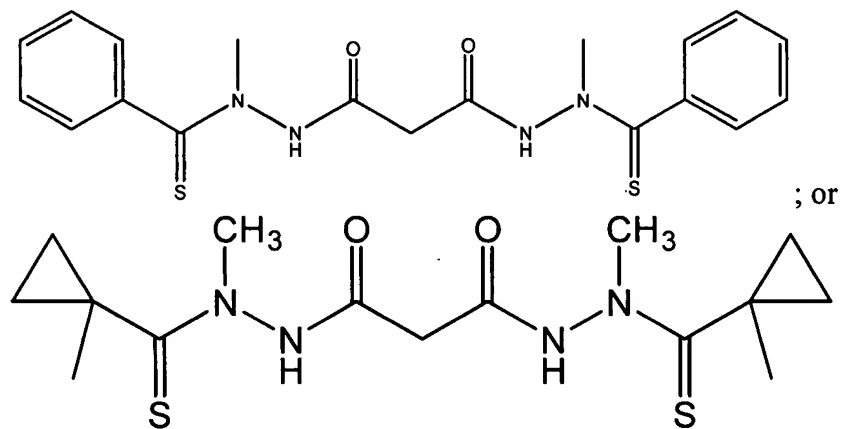
Y'' is a covalent bond or -CH₂-; and

R₁ and R₂ are both a substituted or unsubstituted aliphatic group.

31. (Original) The method of Claim 30 wherein R_1 and R_2 are both C3-C8 cycloalkyl group optionally substituted with at least one alkyl group.
32. (Original) The method of Claim 31 wherein R_3 and R_4 are both a substituted or unsubstituted alkyl group.
33. (Original) The method of Claim 32 wherein R_1 and R_2 are both cyclopropyl or 1-methylcyclopropyl.
34. (Original) The method of Claim 1, wherein the compound is:



35. (Original) The method of Claim 18, wherein the compound is:



36. (Canceled)
37. (Previously Presented) The method of Claim 1, wherein the multi-drug resistant cancer is melanoma.
38. (Previously Presented) The method of Claim 18, wherein the cancer is breast carcinoma or leukemia.
39. (Previously Presented) The method of Claim 18, wherein the cancer is melanoma.